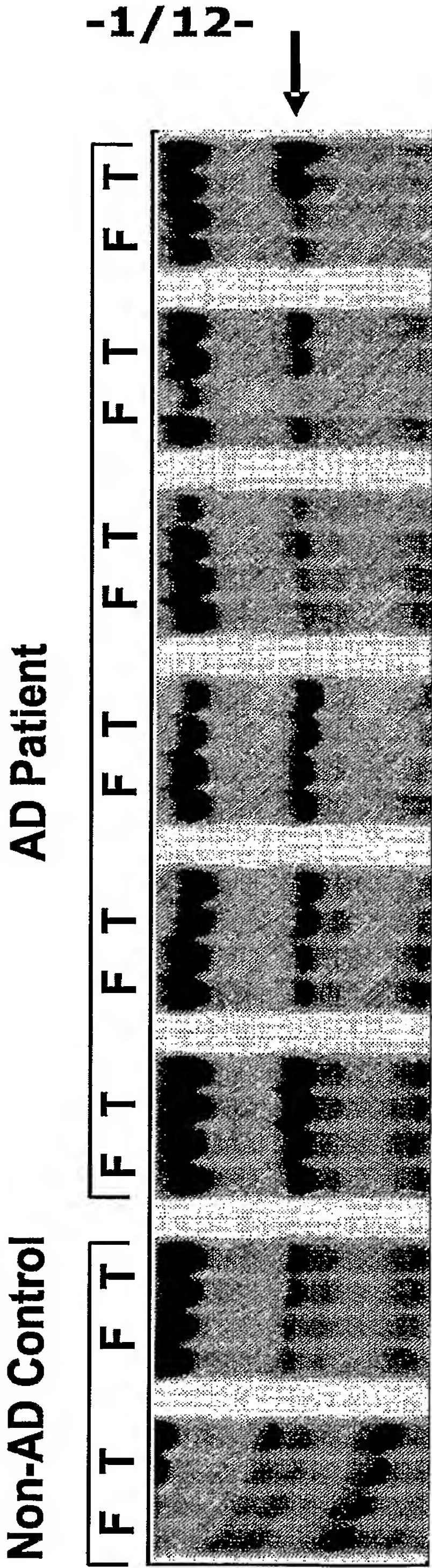
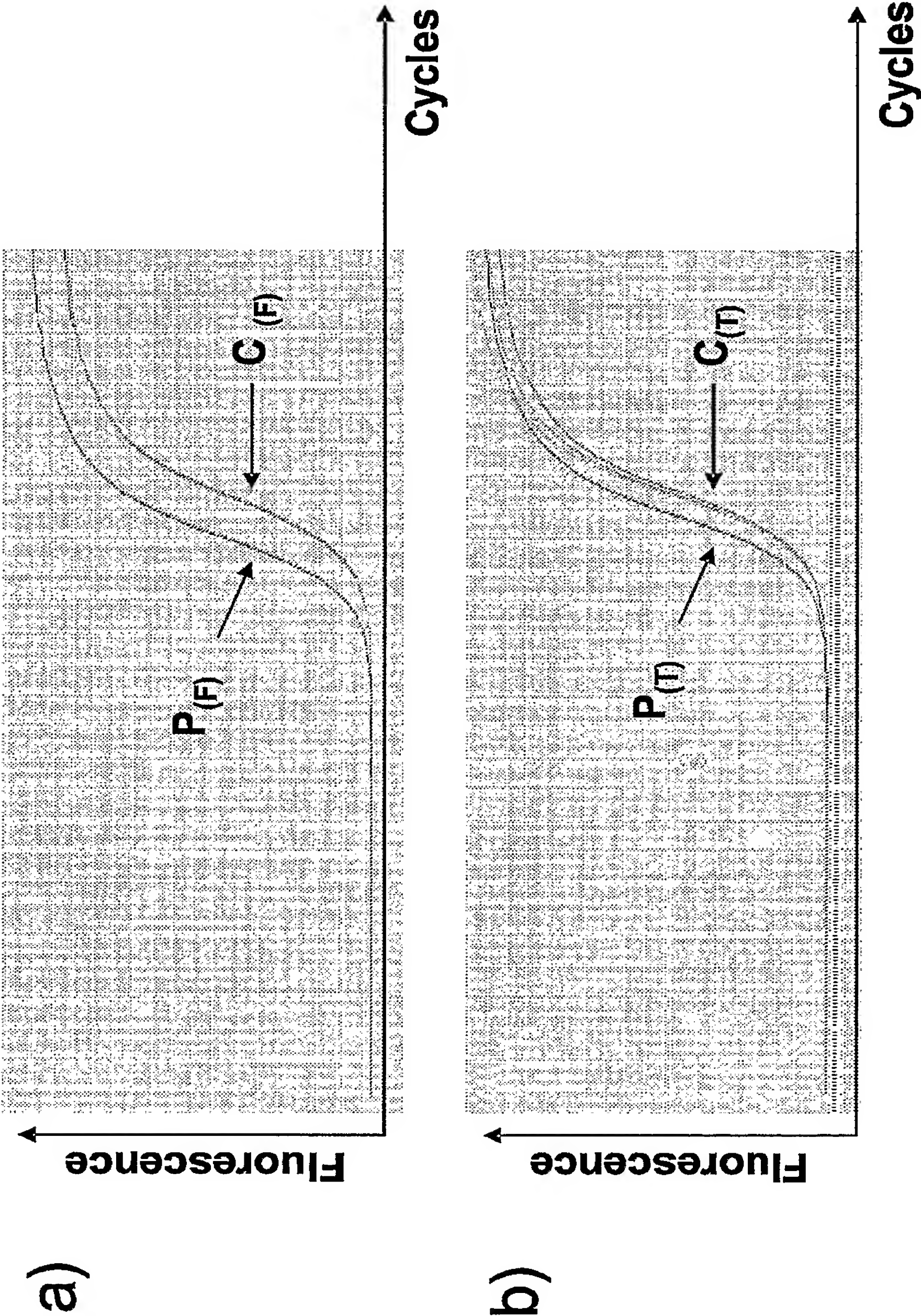


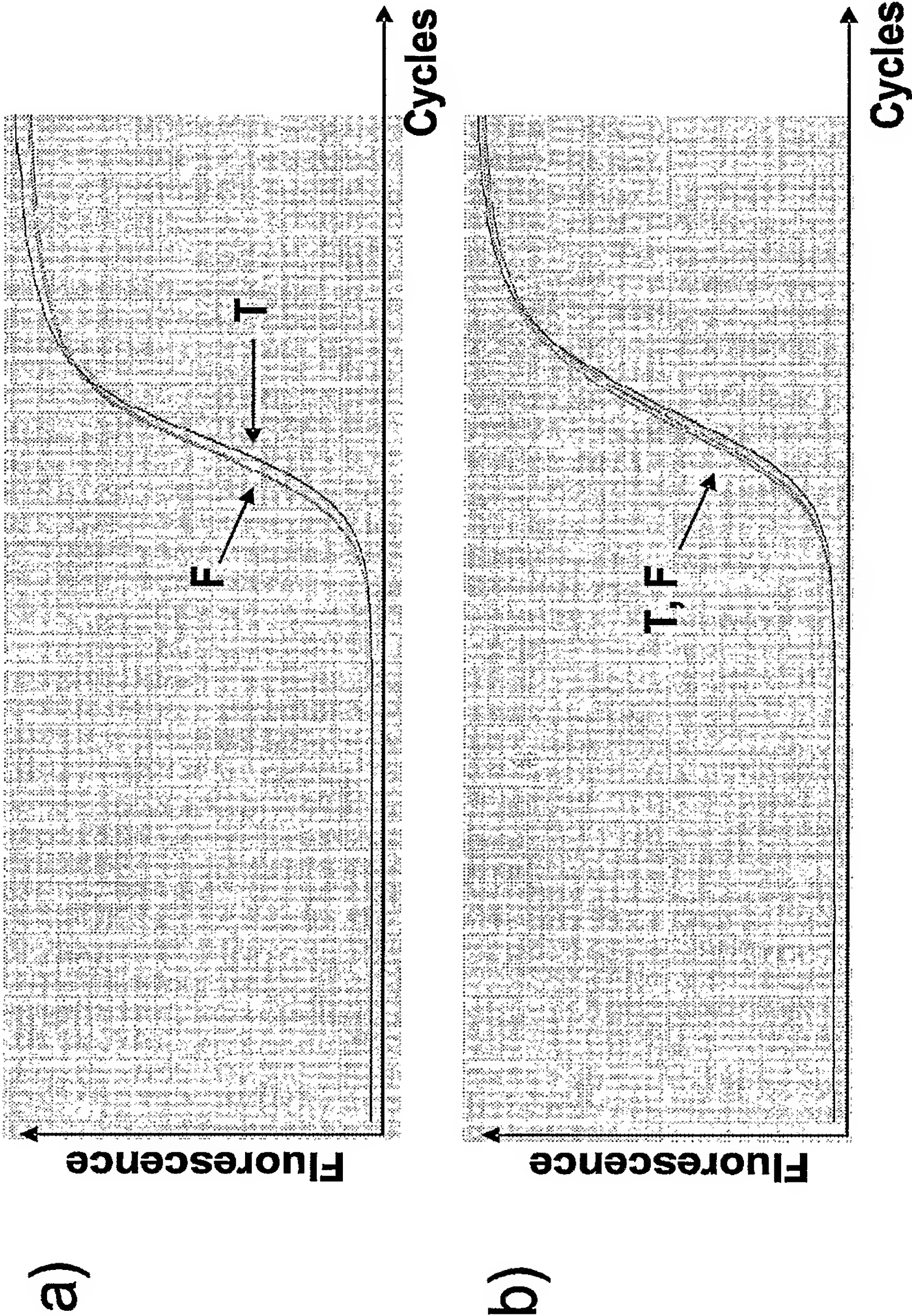
Fig. 1: Identification of differentially expressed genes in a fluorescence differential display screen



**Fig. 2: Verification of differential expression
of KCNE4 by quantitative PCR**



**Fig. 3: Verification of differential expression
of KCNE4 by quantitative PCR**



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Fig. 4 : SEQ ID NO. 1:
amino acid sequence of
human KCNE4 protein

Length: 170 aa

1	MLKMEPLNST	HPGTAASSSP	LESRAAGGGS	GNGNEYFYIL	VVMSFYGIFL
51	IGIMLGYMKS	KRREKKSSLL	LLYKDEERLW	GEAMKPLPVV	SGLRSVQVPL
101	MLNMLQESVA	PALSCTLCSM	EGDSVSSESS	SPDVHLTIQE	EGADEEELEET
151	SETPLNESSE	GSSENIHQNS			

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**Fig. 5: SEQ ID NO. 2:
nucleotide sequence of
human KCNE4 cDNA**

Length: 1204 bp

```
1  AGCAGAAGAA CCCTCTTGGA CTGGACGATT TGGGAATTCA AACTTGGGA
51  CAAACTGTCA GCCTTGCCCC TGCTGTGGAG GCAGCCTCAA TGCTGAAAAT
101 GGAGCCTCTG AACAGCACGC ACCCCGGCAC CGCCGCCTCC AGCAGCCCCC
151 TGGAGTCCCG TCGGCCCGGT GCGGCAGCG GCAATGGCAA CGAGTACTTC
201 TACATTCTGG TTGTCATGTC CTTCTACGGC ATTTTCTTGA TCGGAATCAT
251 GCTGGGCTAC ATGAAATCCA AGAGGCGGGA GAAGAAGTCC AGCCTCCTGC
301 TGCTGTACAA AGACGAGGAG CGGCTCTGGG GGGAGGCCAT GAAGCCGCTG
351 CCCGTGGTGT CGGGCCTGAG GTCGGTGCAG GTGCCCCTGA TGCTGAACAT
401 GCTGCAGGAG AGCGTGCGC CCGCGCTGTC CTGCACCCTC TGTTCATGG
451 AAGGGGACAG CGTGAGCTCC GAGTCCTCCT CCCCAGACGT GCACCTCACC
501 ATTCAGGAGG AGGGGGCAGA CGAGGAGCTG GAGGAGACCT CGGAGACGCC
551 CCTCAACGAG AGCAGCGAAG GGTCTCGGA GAACATCCAT CAGAATTCCT
601 AGCACCCCCG GGACCCCTGC GGGTGGCTCC ATCAGCCAGC AACCTTAGAG
651 AGAGGAAAGA CAGTTTTCAA GTGTCTGGTT TCACTTTCAC AGTGCGGCTG
701 CCACTTTGAA GAGACCCTTG GTAAACCCCT GATTCGGGGT GGGGTGGGGG
751 ACTAGGCTCA GCCGGAACCA GCACCTCCAA GGAGTCCGGG AGGTGCCTGT
801 GGTTTGCACC CACCACTGAA AAAGCCGCGG AGATGCGCAG CGCGTACACT
851 GACTTTGGGG CCTGGGTGTT GGGGTTCTGA TCAGAATTG GCGGGATGAT
901 ATGCTTGCCA TTTTCTCACT GGATGCCCTG GGTAGCTCCT GCAGGGTCTG
951 CCTGTTCCCA GGGCTGCCGA ATGCTTAGGA CACGCTGAGA GACTAGTTGT
1001 GATTTGCTAT TTTGCCTAGA GCTTTGTCCT TCTAGATCTG ATTGGCTGTA
1051 AGTATCTCTA CTGTGTACCT GTGGCATTCC TTCACAGTGG GTTACAAGCT
1101 TCTTTTGGAT TAGAGGGGGA TTTTGTATGG GAGAAAGCTG GAGATCTGAA
1151 CCCAGCCCAT TTGCACACTA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA
1201 AAAA
```

-6/12-**Fig. 6: SEQ ID NO. 3****Length: 193 bp**

```
1  TAGTGTGCAA ATGGGCTGGG TTCAGATCTC CAGCTTTCTC CCATCAAAAA
51  TCCCCCTCTA ATCCAAAAGA AGCTTGTAAC CCACTGTGAA GGAATGCCAC
101 AGGTACACAG TAGAGATACT TACAGCCAAT CAGATCTAGA AGGACAAAGC
151 TCTAGGCAAA ATAGCAAATC ACAACTAGTC TCTCAGCGTC ACC
```

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Fig. 7: SEQ ID NO. 4:
nucleotide sequence of
human KCNE4 coding sequence

Length: 513 bp

```
1  ATGCTGAAAA TGGAGCCTCT GAACAGCACG CACCCCGGCA CCGCCGCCTC
51  CAGCAGCCCC CTGGAGTCCC GTGCGGCCGG TGGCGGCAGC GGCAATGGCA
101 ACGAGTACTT CTACATTCTG GTTGTTCATGT CCTTCTACGG CATTTTCTTG
151 ATCGGAATCA TGCTGGGCTA CATGAAATCC AAGAGGCGGG AGAAGAAGTC
201 CAGCCTCCTG CTGCTGTACA AAGACGAGGA GCGGCTCTGG GGGGAGGCCA
251 TGAAGCCGCT GCCCGTGGTG TCGGGCCTGA GGTCGGTGCA GGTGCCCTG
301 ATGCTGAACA TGCTGCAGGA GAGCGTGGCG CCCGCGCTGT CCTGCACCCT
351 CTGTTCCATG GAAGGGGACA GCGTGAGCTC CGAGTCCTCC TCCCCGGACG
401 TGCACCTCAC CATTGAGGAG GAGGGGGCAG ACGAGGAGCT GGAGGAGACC
451 TCGGAGACGC CCCTCAACGA GAGCAGCGAA GGGTCCTCGG AGAACATCCA
501 TCAGAATTCC TAG
```

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**Fig. 8: Alignment of SEQ ID NO. 2
with SEQ ID NO. 3**

Length: 193 bp

```

193  GGTGACGCTGAGAGACTAGTTGTGATTTGCTATTTTGCCTAGAGCTTTGT 144
    || |||||
978  GGACACGCTGAGAGACTAGTTGTGATTTGCTATTTTGCCTAGAGCTTTGT 1027
    |||||
143  CCTTCTAGATCTGATTGGCTGTAAGTATCTCTACTGTGTACCTGTGGCAT 94
    |||||
1028 CCTTCTAGATCTGATTGGCTGTAAGTATCTCTACTGTGTACCTGTGGCAT 1077
    |||||
93   TCCTTCACAGTGGGTTACAAGCTTCTTTTGGATTAGAGGGGGATTTTTGA 44
    |||||
1078 TCCTTCACAGTGGGTTACAAGCTTCTTTTGGATTAGAGGGGGATTTTTGA 1127
    |||||
43   TGGGAGAAAGCTGGAGATCTGAACCCAGCCCATTTCACACTA 1
    |||||
1128 TGGGAGAAAGCTGGAGATCTGAACCCAGCCCATTTCACACTA 1170
    |||||
```


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**Fig. 9 : Alignment of KCNE4 RT-PCR
primers with human KCNE4 cDNA,
SEQ ID NO. 2**

```
1 GGTTTGCACCCACCACTGA 19
  |||||
801 GGTTTGCACCCACCACTGA 819

      19 TCAGAATTTGGCGGGATGA 1
      |||||
881 TCAGAATTTGGCGGGATGA 899
```

**Fig. 10 : Schematic alignment of SEQ ID NO. 3
with human KCNE4 cDNA, SEQ ID NO. 2**

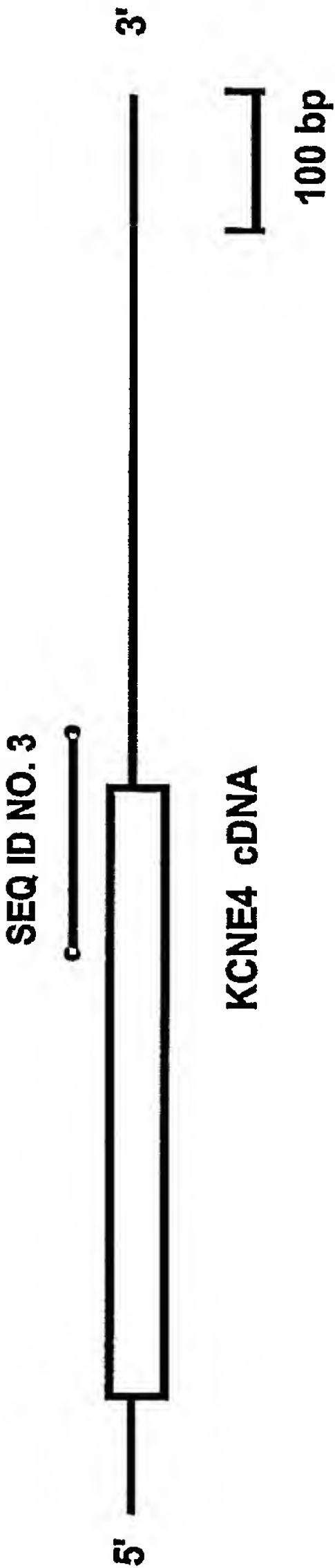


Fig. 11 : Analysis of absolute mRNA expression of KCNE4

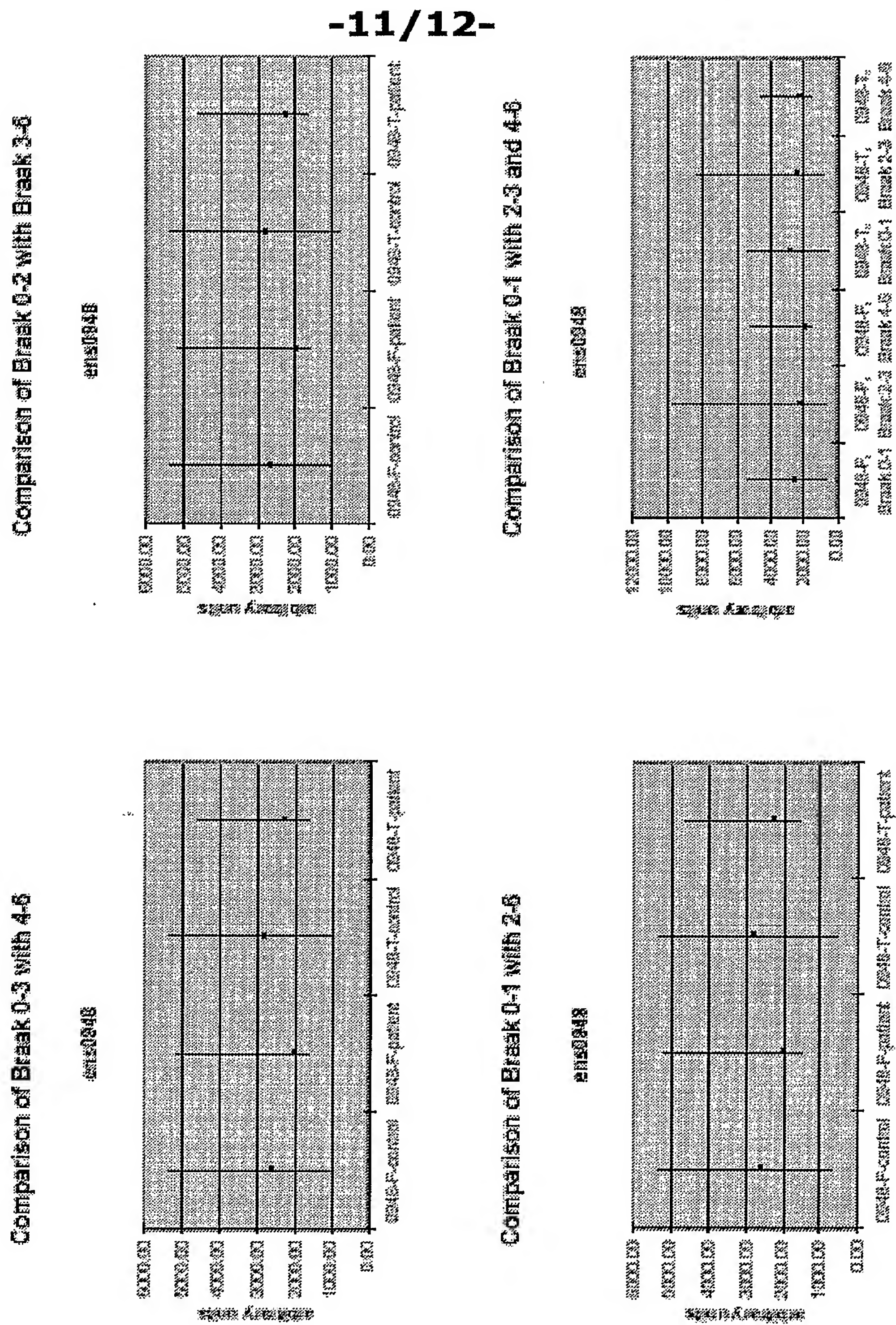


Fig. 12 :

